



Department of Energy
Washington, DC 20585

June 29, 2004

Dr. C. Paul Robinson
[]
Sandia Corporation
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Subject: Sandia National Laboratories Price-Anderson Amendments Act Program Review

Dear Dr. Robinson:

During the period May 18-19, 2004, the Office of Price-Anderson Enforcement (OE) conducted a review of the Sandia Corporation Sandia National Laboratories (SNL) Price-Anderson Amendments Act (PAAA) Program. Our review included an evaluation of SNL's process to screen noncompliances for PAAA applicability, to report and track noncompliances in the Noncompliance Tracking System (NTS) and internal tracking systems, and to correct deficiencies in a timely manner. Our evaluation also included a limited review of your management and independent assessment process.

Overall, OE noted significant improvement in the SNL PAAA Program as compared to the previous PAAA Program Review conducted in 1999. Our review identified the following program strengths as compared to the weaknesses identified during the 1999 review:

- SNL has substantially improved the identification and reporting of PAAA noncompliances and now reviews a broad set of information sources.
- SNL's process to identify and manage resolution of quality problems has greatly improved.
- SNL has made good strides in the PAAA group working in a collaborative fashion with the line organization.
- SNL TA-V's management identified that they have adopted use of the Quality Assurance (QA) Rule criteria in all of their operations, integrating it into the way they do business. This is a substantial shift in focus and emphasis at TA-V as compared to 1999 regarding the use of QA principles to support safety in operations.

Additionally, OE identified a number of other program strengths including the following:

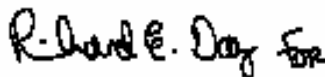
- SNL has developed a good structure for managing the PAAA Program with a PAAA Program Integration Office, use of QA and Radiation Protection (RP) subject matter experts, and established interfaces across SNL.
- The PAAA Program Manager has been assigned broad nuclear safety rule implementation responsibilities, besides oversight of screening and reporting of noncompliances.
- The Price-Anderson Review Committee (PARC) appears to be an effective tool for the SNL senior management to evaluate nonconformances and apply a consistent analytical approach.
- SNL has established a clear and professional PAAA introductory training course for general employee awareness and is developing a more comprehensive PAAA training program for Division Environment, Safety and Health (ES&H) Coordinators and Managers.
- The PAAA Program's analysis and trending of noncompliances in the Radiological Protection Improvement Reports (RPIR) identified and reported several programmatic issues into the NTS during 2003.
- SNL has taken steps to create a Corporate Issues Management Process as part of initiatives by SNL to improve operational and safety performance through its Corporate Performance Assurance program.
- SNL uses a Laboratory Assurance Team with subcommittees to identify, evaluate and resolve broad issues in the areas of compliance and infrastructure, risk management and quality. The infrastructure area includes focus on PAAA, ES&H, procurement and worker safety.
- Noncompliances reported into the NTS require 100 percent verification of completion of corrective actions. Matters identified as PAAA noncompliances that are below the NTS reporting threshold are subject to verification of completion of corrective actions on a sampling basis, using a guideline of 10 percent of such actions.
- For both the independent assessment and management assessment programs, SNL uses structured approaches that consider areas of risk, management input, and results of prior reviews to establish planned areas subject to management assessments and for independent assessments.

OE's review did identify several weaknesses, including the following:

- Although SNL generally appears to be making the correct determination on issues that constitute noncompliances with rule requirements, OE identified 2 of 16 examples that should have been classified otherwise as PAAA noncompliances. Additionally, regarding NTS reportability, OE identified 2 out of 11 examples that should have been considered for reporting into the NTS.
- Several examples of apparently restrictive language contained in the implementing procedures for identifying and screening noncompliances were identified. However, OE's onsite review determined that in actual practice, the SNL PAAA Program is not currently applying this apparently restrictive language in the identification, analysis, and reporting of noncompliances.
- OE received indications from local DOE and some SNL staff that although many potential PAAA noncompliance conditions are being sent to the PAAA Program Manager for screening, a number of such issues are not being routinely submitted. Additionally, no oversight, by the PAAA Program Integration Office or others, is being performed to ensure that the proper set of potential noncompliance issues is being forwarded to the PAAA Program Office.
- The final decision authority on PAAA noncompliance or NTS reportability determinations is not clear based on language contained in SNL's *Price-Anderson Amendments Act (PAAA) Program Plan*, document PG 470208.
- Some extended time periods between discovery, identification of a PAAA issue and NTS reporting were noted.
- SNL has expanded the RPIR process to include identified noncompliances, the determination of the cause of a problem, corrective actions and schedules for completion, and tracking closure of the actions. However, the process does not include these elements for other quality problems such as equipment failures or degradation problems, material condition issues, or process improvement issues.
- A number of "Suggestions" came out of the SNL waste sorting assessment for the lapel monitoring violations, but it is not clear that actions were taken on these since none of the items from this assessment were added to the corrective actions for the related NTS report.
- OE noted several statements in general corporate and PAAA procedures that appeared to be inappropriately limiting application of the QA Rule when determining those activities, projects or facilities where the rule should be implemented. From discussions with SNL management and review of how the QA Rule is currently being applied, it became clear that this language is a carryover from past practices and does not represent current SNL practices.

Failure to correct the weaknesses noted above may result in a potential reduction or loss of mitigation as described in the DOE Enforcement Policy (10 CFR 820 Appendix A) for any future SNL enforcement action. Details of the OE review are provided in the enclosure. No reply to this letter is required. If you have any questions, please contact me at (301) 903-0100 or have your staff contact Susan Adamovitz at (301) 903-0125.

Sincerely,

A handwritten signature in black ink, appearing to read "R. David E. Day Sr.", is written over the typed name.

Stephen M. Sohinki
Director
Office of Price-Anderson Enforcement

Enclosure: Program Review Report

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PRICE-ANDERSON AMENDMENTS PROGRAM REVIEW

SANDIA CORPORATION SANDIA NATIONAL LABORATORIES

I. Introduction

During the period May 18-19, 2004, the Department of Energy's (DOE) Office of Price-Anderson Enforcement (OE) performed a review of the Sandia Corporation Sandia National Laboratories (SNL) Price-Anderson Amendments Act (PAAA) Program. This review included an evaluation of the contractor's processes for the identification and screening of potential noncompliances, for reporting and tracking noncompliances in either the Noncompliance Tracking System (NTS) or in SNL's internal tracking system, and for the formal tracking and resolution of quality issues.

Overall, OE noted significant improvements in the SNL PAAA Program as compared to the 1999 PAAA Program review. OE's review did identify several areas for improvement, which should be addressed to ensure appropriate mitigation consideration during possible future enforcement actions and to provide a basis for exercising discretion for other noncompliances. The results of the review are summarized below.

II. General Implementation

The SNL PAAA Program is described in PG 470208, *Price-Anderson Amendments Act (PAAA) Program Plan* which identifies the SNL PAAA Program Owner as the Vice President (VP), Human Resources and Protection Services. The *Program Plan* further specifies that implementation of the SNL PAAA Program is the responsibility of the Manager, PAAA Program Integration Office. The PAAA Program Manager reports to the VP, Human Resources and Protection Services. The goals of the PAAA Program Integration Office include ensuring that (1) issues are effectively screened, (2) the results are communicated to the line organizations, and (3) potential noncompliances are appropriately reported to OE or are placed in an internal process and properly tracked to closure. The PAAA Program Integration Office is also responsible for identifying programmatic or repetitive noncompliance issues.

Duties for the PAAA Program Manager include the following:

- Ensuring development of SNL's infrastructure and processes to implement nuclear safety rules, and assisting line organizations in such implementation.
- Assisting line organizations in analyzing events for nonconformance with SNL's Business Rules that contain the PAAA Nuclear Safety Rules.
- Determining if reported issues are potential PAAA noncompliances and the appropriate disposition of those issues in either SNL's local tracking system or DOE's NTS.
- Creating teams, including the PAAA Review Committee (PARC) and the Price-Anderson Evaluation Team (PET), to assist the PAAA Program Integration Office in evaluating issues for PAAA applicability and reporting.

The PARC is a senior level review committee that provides guidance to the PAAA Program Manager and meets every two weeks to screen potential nuclear safety nonconformances reported to the PAAA Program Integration Office. The PARC reviews several sources of potential nonconformances, including all Radiological Protection Improvement Reports (RPIR), occurrence reports, and assessments. Other information sources include incident commander logs, media reports and DOE inquiries. The PARC consists of the PAAA Program Manager, the alternate PAAA coordinator, a legal representative, the Radiation Protection Program Manager, a radiation protection specialist, a quality assurance specialist, the PAAA Project Manager, and a representative from the Radiation Protection Safety Committee. Additionally, a memorandum of understanding between the PAAA Program and the Nuclear Weapons Strategic Management Unit (NWSMU) dated April 26, 2004, documents the NWSMU PAAA liaison responsibilities, which include representing NWSMU at the PARC meetings.

SNL has established a network of Environment, Safety and Health (ES&H) Coordinators in each division who interface with the PAAA Program Manager and facilitate within their division understanding of rule requirements. SNL is developing a more comprehensive training course on PAAA for these Coordinators and managers.

The PET is a support team for the PAAA Program and is activated at the request of the PAAA Program Owner, with assistance from the PAAA Program Manager. The PET reviews issues and events from a corporate viewpoint and also gathers additional information about an issue or event when needed.

OE noted the following strengths related to the SNL PAAA program:

- SNL has developed a good structure for managing the PAAA Program, with a PAAA Program Integration Office, use of Quality Assurance (QA) and Radiation Protection (RP) subject matter experts, and established interfaces across SNL.
- The PAAA Program Manager has been assigned broad nuclear safety rule implementation responsibilities, in addition to oversight of screening and reporting of noncompliances.
- The PARC appears to be an effective tool for the SNL senior management to evaluate nonconformances and apply a consistent analytical approach.
- SNL has established a clear and professional PAAA introductory training course for general employee awareness and further plans to develop a more comprehensive PAAA training program for division ES&H Coordinators and Managers.

Additionally, the following PAAA program strengths were noted as compared to the weaknesses identified previously during OE's 1999 SNL PAAA program review:

- SNL has substantially improved the identification and reporting of noncompliances and now reviews a broad set of information sources.
- SNL's process to identify and manage quality problems has greatly improved.
- SNL PAAA personnel have made good strides in working in a collaborative fashion with the line organization.

In June 2003, SNL contracted with an independent consultant to conduct an assessment of the PAAA program. The independent assessment identified opportunities for improvement which included (1) establishing institutional level programs for quality improvement and issues management and also for an effectiveness review process for corrective actions, (2) improving the consistency in causal analyses and corrective action determinations, and (3) focusing line management attention on management and independent assessments. OE reviewed the assessment report and confirmed SNL's corrective action plan includes steps to address each issue from this independent assessment.

III. Identification and Screening

OE evaluated SNL's process for screening potential PAAA noncompliances by interviews of personnel and review of selected screening documentation. SNL's process, as described in AOP 2004-03, *Identification, Screening and Reporting of Potential PAAA Noncompliance*, assigns responsibility to the PAAA Program Manager for screening and reporting all potential noncompliances. The PAAA Program Manager assigns a specific PARC member, called the PAAA Point of Contact (POC), for the

follow-up and analysis including recommended disposition of an issue. The POC gathers information and presents the issue at the next PARC meeting. Disposition can include (1) no further action, (2) reporting into the Sandia PAAA Access Database (Database) for future trending, or (3) reporting into the NTS. The PAAA Program Manager has responsibility for designation that an issue is a PAAA noncompliance; however, some concerns were noted with potential conflicting statements in the PAAA Program Plan on resolving disagreements, as discussed in the next section of this report. All nonconformances screened by the PARC are documented in the Database, regardless of disposition.

SNL has recently established a trending process within the PAAA Program to evaluate noncompliance conditions in the internally tracked process, and it will take some time to evaluate its effectiveness. The intent is to identify repetitive or programmatic noncompliance conditions. Such a process has been applied for RPIR issues for some time and has identified substantive problems.

OE's review of the Database identified that a broad range of sources were being evaluated for potential noncompliances. OE considered this to be a PAAA program strength. In order to evaluate SNL's identification and screening process, OE selected 16 events/issues from the Database for the time period October 2002 to April 2004 for review. OE determined that SNL's decisions were generally appropriate in identifying PAAA issues. In two examples OE questioned SNL's analysis and decision that the issue was not a PAAA noncompliance. The examples involved the failure to specify, document, or track worker training requirements, and the programmatic issues associated with a January 2003 site wide stand-down of lock out/tag out activities.

The following strengths were noted in SNL's identification and screening process for potential PAAA noncompliances:

- A broad set and large number of issues (termed 'nonconformances') are being transmitted to and screened by the PARC and PAAA staff.
- The PAAA Program's analysis and trending of noncompliances in the RPIRs identified and reported several programmatic issues into the NTS during 2003.
- The PAAA Program's notification to the line management owner that an issue is a PAAA noncompliance is a positive step.

The following weaknesses were noted:

- Although SNL generally appears to be making the correct determination on issues that constitute noncompliances with rule requirements, OE identified 2 of 16 examples that should have been classified otherwise as PAAA noncompliances.

- OE identified several examples of apparently restrictive language contained in the implementing procedures for identifying and screening noncompliances, including the following:
 - AOP 2004-03, *Identification, Screening and Reporting of Potential PAAA Noncompliances*, repeatedly used the term “event” throughout the procedure to identify the instigator for analysis and reporting of noncompliances. Additionally, AOP 2004-04, *Trend Analysis for Identifying Repetitive or Programmatic Issues*, uses the term “event” throughout the procedure. Use of this term could limit identification of PAAA noncompliances and possibly restrict PAAA analysis to events only if applied inappropriately.
 - AOP 2004-04 Appendix A: *Criteria for Determining Repetitive and/or Programmatic Issues*, repeatedly uses the term “event” to identify a repetitive or programmatic issue. The application of this language could be limiting if inappropriately applied to a single event with multiple breakdowns in the planning and implementation of the work or to a series of non-events such as multiple deficiencies in maintenance, training, or procurement that could be considered programmatic deficiencies.
 - PG 470208, *Price-Anderson Amendments Act (PAAA) Program Plan*, defines a programmatic issue to be “when several local events are similar (have a common cause) even though the events are not identical.” As discussed in the previous example, the application of this language could be limiting in the identification of PAAA issues.
 - ES&H Manual, Section 18G – *Identifying, Reporting, and Correcting Nuclear Safety Nonconformances* and PG 470208 *Price-Anderson Amendments Act (PAAA) Program Plan* use the term “potential for radiological harm” as one of the necessary conditions when screening a potential noncompliance to be considered a PAAA issue. Similarly, procedure AOP 2004-01, *Title 10 CFR 830, Subpart A, Quality Assurance Requirements Applicability*, contains language that when evaluating an incorrectly performed activity, a judgment must be made as to whether the activity “contributed to a significantly greater potential for radiological harm” in order to be considered subject to Subpart A quality assurance requirements. This is inappropriate use of language offered by DOE’s Office of General Counsel which clarified the determination of a “nonreactor nuclear facility” for purposes of establishing that Part 830 applied to that facility. It is not appropriate to use this language when evaluating individual issues or problems. Related concerns with use of such language in determining general applicability of the QA Rule are discussed in Section VI.A of this report.

However, OE’s onsite review determined that in actual practice, the SNL PAAA Program is not currently applying the above apparently restrictive language in the identification, analysis, and reporting of noncompliances. OE discussed this terminology issue with SNL personnel and suggested that SNL change the language

in the implementing documents to be consistent with their actual practices and OE's expectations.

- The *Master Report for PAAA Events* form was sometimes incomplete or contained confusing or inaccurate information. Examples included:
 - The failure to document the recorded issue as an "assessment finding" or to document the basis for rule citation.
 - The term *Event Trigger* could be misleading in that potential noncompliances could be other than event related.
 - The *Event Trigger* in the *Master Report* column was often incorrectly identified as a "Self-disclosing Event" when the potential noncompliance was not related to an event.
- OE received indications from local DOE and some SNL staff that although many potential PAAA noncompliance conditions are being sent to the PAAA Program Manager for screening, a number of such issues are not being routinely submitted. Additionally, no oversight, by the PAAA Program Integration Office or others, is being performed to ensure that the proper set of potential noncompliance issues is being forwarded to the PAAA Program Office. Consistent screening of all such conditions is expected by OE.

IV. Evaluation of NTS Reportability

OE reviewed SNL's process for noncompliance evaluation and NTS reporting by discussion with PAAA program personnel and review of SNL's reporting history and trending processes. As discussed previously, SNL's evaluation and reporting process is documented in AOP 2004-03. AOP 2004-04, *Trend Analysis for Identifying Repetitive or Programmatic Issues* specifies the process for performing trend analysis and ownership is assigned to the PAAA Program Manager. The PAAA Database is used to generate quarterly reports which involve a rolling three-year data source to identify repetitive or programmatic issues. OE selected 11 issues from the *Master Report for PAAA Events* and evaluated SNL's reporting determinations. OE concluded that there was generally good agreement between OE's and SNL's analysis. However, OE identified two issues that should have been considered for reporting into the NTS. These two issues involved the programmatic issues associated with a January 2003 site wide stand-down of lock out/tag out activities discussed previously in this report and a single event involving multiple failures to follow radiation work permit requirements.

OE reviewed SNL's NTS reports for calendar years 2003 and 2004 and noted that the length of time between discovery, identification of PAAA issue and NTS reporting was prolonged in some cases. Discussions with PAAA personnel indicated that some of these prolonged time spans may be the result of assigning the PAAA discovery date to the first event/issue in a rollup of several issues or events. OE clarified that the

discovery date for a roll-up of repetitive or programmatic issues is based on the date the decision was made that the repetitive or programmatic issue existed, not on the occurrence date of the first issue. OE noted that there were other examples of delayed discovery, identification and reporting that did not involve a rollup of issues.

OE identified the following strength in reporting PAAA noncompliances:

- SNL is generally making the correct determination on NTS reportability.

OE identified the following weaknesses in reporting PAAA noncompliances:

- The SNL PAAA Program Plan is not clear on the final decision authority on PAAA noncompliance or NTS reportability determinations. SNL's *Price-Anderson Amendments Act (PAAA) Program Plan*, document PG 470208, effective March 2003, Section 3.1.3 states that the PAAA Program Manager has responsibility for PAAA noncompliance determinations and appropriate reporting mechanism. Section 4.2 states that the PAAA Program Manager has responsibility for determining if issues are PAAA noncompliances. However, Section 4.2 of that same document states that disagreements with any determinations are facilitated by the PAAA Program Owner, and the final determination is made by the PAAA Program Owner, PAAA Nuclear Safety Rule Owner and/or SNL's Legal Division. This last statement is not definitive and appears to conflict with other statements in the document on PAAA noncompliance and NTS reportability determination authority.
- Two programmatic conditions over the past year were identified by OE that should have been reported into NTS.
- Some extended time periods for reporting into NTS were noted.

V. Corrective Action Management

A. Quality Problem Resolution/Issues Management

OE's PAAA Program Review report of May 1999 identified certain deficiencies in the quality problem resolution area, including lack of sufficient elements in the RPIR process to serve as a quality problem resolution process. At that time the process did not include elements to determine cause of the problem, record corrective actions and schedules for completion, or track closure of the actions. SNL has expanded the RPIR process to at least pick up these elements for noncompliance conditions. However, the current process does not include these elements for other quality problems, for example equipment failure or degradation, material condition issues, or process improvement issues. This is viewed by OE as a weakness of the RPIR process and a potential noncompliance.

The SNL approach to managing resolution of quality problems as required by the Quality Improvement section of 10 CFR 830.122 is for each division to have their

own local resolution processes. Additionally, SNL is developing a process to identify and manage resolution of corporate issues (i.e., ones which have broader implications than at one site or division). Local resolution processes will remain, and issues of potential broader applicability will be forwarded into the corporate system. The new Corporate Issues Management Process (Corporate Process) will be operational September 2004 and databases for local problem resolution processes will be gradually integrated with the Corporate Process over the following approximately two years.

The following program strengths were noted:

- SNL has taken steps to create a Corporate Process as part of initiatives by SNL to improve operational and safety performance through its Corporate Performance Assurance program.
- SNL plans to validate the completeness of each local problem resolution process to satisfy quality assurance expectations.
- SNL uses a Laboratory Assurance Team with subcommittees to identify, evaluate and resolve broad issues in the areas of compliance and infrastructure, risk management and quality. The infrastructure area includes focus on PAAA, ES&H, procurement and worker safety, and includes the Radiation Protection Safety Committee.

B. Causal Analysis

Section 18G of SNL's ES&H Manual requires a causal analysis for all nuclear safety noncompliances. The procedures guide use of a graded approach for such analyses. As part of this review, OE focused on the comprehensiveness and depth of three example causal analyses which pertained to issues reported into the NTS. The three NTS-reported examples involved (1) a series of radiological events in one facility, (2) multiple events at one facility with failure to wear required lapel radioactivity monitoring devices, and (3) movement of special nuclear material resulting in the quantity of fissile material exceeding criticality limits. Some strengths and a weakness were identified in this limited example set.

The following strengths were noted from these three examples:

- The causal analyses for these events were comprehensive.
- The radiological events' causal analysis does a good job of identifying common themes or causes across the multiple events.
- The causal analyses considered worker behavior influences. Two of the causal analyses considered the process and worker behavior influence issues that caused the problem. While the third causal analysis involving the lapel monitoring

violations during waste sorting activities focused primarily on the process weakness that caused the events, SNL engaged a separate internal review of waste sorting operations that also evaluated human factors considerations.

A number of “Suggestions” came out of the SNL waste sorting assessment for the lapel monitoring violations, but it is not clear that actions were taken on these since none of the items from this assessment were added to the corrective actions for the related NTS report. This lack of clearly documented action appears to be a weakness in this case in apparently not using the results of analyses of events or not recording the further actions taken in NTS.

This review of SNL’s root cause analyses was a limited sample, so conclusions on the overall causal analysis process cannot be drawn.

C. NTS Report Closeout

SNL’s procedures require the line manager responsible for a noncompliance to forward the causal analysis, corrective action plan, and evidence of completion of corrective actions to the PAAA Program Manager. Noncompliances reported into NTS require 100 percent verification of completion of corrective actions. Matters identified as PAAA noncompliances that are below the NTS reporting threshold are subject to verification of completion of corrective actions on a sampling basis, using a guideline of 10 percent of such actions. This level of verification for PAAA noncompliances is considered a strength of the program.

VI. **Safety Management Issues**

A. Applicability of the QA Rule

The OE SNL PAAA Program Review in 1999 identified concerns with language in various procedures in Technical Area V (TA-V) that attempted to inappropriately limit applicability of the QA Rule, and thus potentially not achieve the safety benefits of the improved and more formal controls from proper application of this rule. Also, various observations or findings from SNL’s assessments were specifically identified as not being subject to PAAA using inappropriate bases. TA-V contains most of the nuclear facilities and operations that require a documented safety analysis and that conduct many activities subject to the QA Rule. OE discussed with senior TA-V management the present management approach to application of QA in TA-V operations. TA-V’s management relayed that they have adopted use of the QA criteria in all of their operations, integrating it into the way they do business. This is a strength and a substantial shift in focus and emphasis at TA-V from 1999 regarding the use of QA principles to support safety in operations.

During this current review OE noted several statements in general corporate and PAAA procedures that appeared to be inappropriately limiting application of the QA Rule, when determining those activities, projects or facilities where the rule should

be implemented. These included statements such as having workers or supervisors judge whether a problem could contribute to a significantly greater potential for radiological harm, or limiting the rule to only work that had the direct potential for radiological harm. The term radiological harm was used by DOE's Office of General Counsel to identify those projects, operations or facilities that constitute a 'nonreactor radiological facility' for the purpose of establishing that the QA Rule applied to activities associated with such 'nonreactor nuclear facilities.' From discussions with SNL management and review of how the QA Rule is currently being applied, it became clear that this language is a carryover from past practices, and does not represent current SNL practices. OE views the use of such language in procedures to be a weakness. SNL management acknowledged the need to correct this language in procedures.

B. Corporate Ownership of Quality Assurance Program

The OE PAAA Program Review of 1999 noted the positive steps being taken by the Radiological Protection Steering Group to provide oversight and coordination of radiological issues and implementation of the Radiological Protection Program. But OE's 1999 report noted the weakness in not having similar leadership and direction for the Quality Assurance Program. Since that time, SNL has established a single QA business rule, which applies the ten criteria to all work at SNL and has formed a Quality Program Office, now part of the Integrated Laboratory Management Systems Office. Additionally, SNL has established a Director's Quality Council, a Quality Assurance Working Group, and a Nuclear Weapons Quality Council to coordinate leadership and implementation of quality assurance. These steps are considered a strength in the management and direction of quality assurance at SNL and clear improvements in this area as compared to 1999.

C. Independent and Management Assessment

As part of this PAAA Program Review, OE evaluated implementation of the SNL's management and independent assessment programs, since OE believes an effective assessment program is a preferred method to identify nuclear safety problems before they result in serious nuclear safety incidents. It should be noted that OE's review in this area was limited in scope, and does not constitute a comprehensive evaluation of SNL's assessment program.

OE selected a sample of recent independent assessments related to nuclear safety performed in TA-V. The assessments selected were (1) an assessment of TA-V nuclear facilities for compliance with 10 CFR 830.120 requirements, (2) an assessment of TA-V radioactive material control, and (3) an SNL operational readiness review of the Auxiliary Hot Cell Facility. Reports on these were issued in April 2003, September 2003 and April 2004, respectively. OE additionally reviewed a sample of management assessments conducted in TA-V as well. These included 14 management assessments in the period from August 2002 to October 2003.

The following program strengths were noted with the independent assessment and management assessment programs:

- SNL used structured approaches that consider areas of risk, management input, and results of prior reviews to establish planned areas subject to management assessments and those subject to independent assessments.
- SNL's Board of Directors approved the planned independent assessments for the coming year.
- All three of the independent assessments reviewed were comprehensive, well-documented, and identified substantive issues and potential noncompliance matters.
- The TA-V management assessments reviewed were: substantive and adequately documented; included a good mix of interviews, document reviews, and work and facility observations; and effectively identified issues and opportunities for improvement.
- SNL has established an integrated assessment program in TA-V that includes management assessments, quality surveillances, and facility walkthroughs.
- SNL had conducted training of TA-V managers on conduct of assessment activities.

VII. Conclusion

The above summarizes OE's review of SNL's PAAA program, including an onsite evaluation during the period of May 18 and 19, 2004. Improvement items identified during the subject review should be addressed to receive mitigation consideration in any future enforcement deliberation and to ensure nuclear safety problems receive appropriate recognition and action. Any actions taken to address these items should be appropriately coordinated with the responsible NNSA Field and Program Office management.